

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/02702

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F26B21/14 F26B21/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F26B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 703 599 A (HUGH SPARKES) 3 February 1954 (1954-02-03) the whole document	1, 13
A	US 2 236 398 A (DRUMMOND FOLSOM E) 25 March 1941 (1941-03-25) the whole document	1, 13
A	US 4 466 202 A (MERTEN ULRICH) 21 August 1984 (1984-08-21) the whole document	1, 13
A	US 5 108 968 A (BARNES JAMES W ET AL) 28 April 1992 (1992-04-28)	
A	US 6 158 147 A (MUELLER WAYNE ET AL) 12 December 2000 (2000-12-12)	

☐ Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

6 October 2003

Date of mailing of the international search report

13/10/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Silvis, H

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/02702

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 703599	A	03-02-1954	NONE	
US 2236398	A	25-03-1941	US 2236397 A	25-03-1941
US 4466202	A	21-08-1984	AT 38893 T CA 1193570 A1 DE 3475342 D1 EP 0121357 A2	15-12-1988 17-09-1985 29-12-1988 10-10-1984
US 5108968	A	28-04-1992	AU 7687991 A WO 9115295 A1	30-10-1991 17-10-1991
US 6158147	A	12-12-2000	US 6167638 B1 CA 2308714 A1	02-01-2001 17-11-2000